UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2

DATE: AUG 1 0 2015

SUBJECT: Removal Site Evaluation for Buffalo White Metal (aka Harry Fox Metal Company), 328 Howard Street, Buffalo, Erie County, New York

FROM: Nick Magriples, On-Scene Coordinator
Removal Assessment and Enforcement Section

TO: Joseph D. Rotola, Chief
Removal Action Branch

Introduction

The United States Environmental Protection Agency (EPA) Region II Removal Action Branch (RAB) has been requested by the EPA Special Projects Branch to determine whether a Comprehensive Environmental Response and Liability Act (CERCLA) removal action was warranted at Buffalo White Metal (Site). The Site was included on a list of hundreds of locations nationwide where secondary lead smelting or alloying may have been conducted between 1931 and 1964, according to entries in historical trade publications. The list was originally compiled by William P. Eckel in a doctoral dissertation for George Mason University, and the research was summarized in an article entitled, "Discovering Unrecognized Lead-Smelting Sites by Historical Methods" (Eckel et al, 2001). In total, 89 of the sites on this list are in New York State. The New York State Department of Environmental Conservation assessed the majority of the sites and ultimately referred 40 of these sites to EPA for further assessment.

Site description and background

The Site is located at 328 Howard Street in Buffalo, Erie County, New York in a mixed commercial, industrial and residential area. It currently consists of an enclosed, asphalt-paved parking lot for an adjoining business. The Site is bordered to the north and east by residences, to the south by Howard Street and industrial properties, and to the west by an industrial business. Other residential areas are present in all directions beyond 400 feet from the Site. A commercial rail corridor is situated approximately 300 feet southeast of the Site.

Available Sanborn maps and aerial photographs indicate that the Site was used for scrap metal and/or smelting from sometime around 1940 till approximately 1980. Melting furnaces and apparent smokestacks were indicated on the available Sanborn maps. Development of the residential area occurred sometime between 1983 and 1995, the same time period when the building on the Site was razed and replaced by a parking lot. Prior to the construction of the residential neighborhood, the area contained a playground and baseball fields. According to available wind rose plots, the prevailing wind direction in Buffalo is approximately southwest to northeast, indicating that the residential neighborhood is downwind of the Site.

During the approximate time period which the Site was occupied, the property to the south of Howard Street, directly across from the Site and the current residential area adjacent to the Site, was occupied by businesses that operated a foundry. These businesses included a steel castings facility and an automotive parts manufacturer.

Site assessment activities/observations

The Pre-remedial site files, which included a Pre-Comprehensive Environmental Response, Compensation and Liability Information System Screening Form for the Site as well as historic Sanborn maps and city directories, were reviewed as part of this RSE. In addition, an internet search for historic articles and aerial photographs was conducted.

Site visits were conducted by the Pre-remedial Site Assessment Team (SAT) contractor and RAB on April 1, 2014 and April 29, 2014, respectively. The Site currently consists of an asphalt-paved parking lot associated with the adjoining business. A strip of grass borders the parking lot to the north and east. Access to the parking lot is restricted by a fence and automated gate. A residential development containing approximately 40 homes with grass-covered yards borders the former Site to the north and east.

The SAT contractor collected soil samples from the Site on October 27 and 28, 2014. The samples were collected from 12 locations on and near the former Site. Two samples were collected from within the former footprint of the Site. Potential release samples were collected from six downwind sample locations based on historically predominant wind directions; these samples were collected east and northeast of the smelter footprint. Samples were also collected from four locations south-southwest and west-southwest of the former Site as background locations. At each sample location, except for four where the auger encountered refusal, soil samples were collected at multiple depth intervals ranging down to 24 inches. The samples were collected from the rights-of-way located along Lord Street, Montgomery Street, and John Paul Court, as well as grassy areas within the footprint of the former Site.

The highest lead levels were identified in the samples collected in the predominantly upwind direction of the Site. Three of these four upwind samples contained lead ranging from 510 mg/kg to 3,800 mg/kg, at sample depths of less than one foot. The highest lead concentration identified in these samples was at a depth of 6 to 12 inches. Tin (120 mg/kg), copper (110 mg/kg), zinc (610 mg/kg), cadmium (1.8 mg/kg) and antimony (5.5 mg/kg) were also detected in these samples, as maximum concentrations. The maximum concentration of lead detected at the Site itself was 900 mg/kg at a depth of 12 to 18 inches. Copper (340 mg/kg) and antimony (8.6 mg/kg) were the only metals of those identified above that were detected at the Site at higher concentrations than those collected in the predominantly upwind direction of the Site. All of the samples collected in the predominantly downwind direction contained lower concentrations of those metals identified above, with the highest lead concentration detected as 300 mg/kg at a depth of 12 to 18 inches.

Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The concentrations of lead identified in the samples collected are the highest in the predominantly upwind direction which would indicate that a release of lead from the Site has not been documented. Concentrations of copper and antimony were identified at higher concentrations in the soils at the Site relative to those collected in the predominantly upwind direction.

Threats to public health or welfare

The concentrations of copper and antimony identified in the samples collected at the Site are below EPA Removal Management Levels for both residential and industrial soil.

Threats to the environment

At this time there is no information to indicate that the Site is currently having an acute impact to the surrounding environment.

Conclusions

Based on the available information, the Site does not warrant a CERCLA removal action at this time.

cc: E. Wilson, ERRD-RAB
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Region 2 Records Center